

CLAIMS

1/ A method of manufacturing packaging articles each having a hollow body with a neck-forming open end, the method comprising the following steps:

- 5 - applying a flat piece of thermoplastic material over an open end of a mold recess;

10 - heating the material;

15 - punching the material by inserting a piston into the mold cavity through its opening so as to form a blank;

20 - blowing the resulting blank against the wall of the mold; and

25 - opening the mold;

30 wherein the mold is constituted by an association of separable elements each constituting a matrix for molding a segment of an article, and the mold is opened by separating the elements, and wherein, while the mold is being opened, the article is sucked against a bottom element of the mold.

35 2/ A method according to claim 1, wherein, prior to being punched, the material is trimmed by being pressed against a sharp element carried by the mold.

40 3/ A method according to claim 1, wherein, prior to being blown, the blank is trimmed by being pressed against a sharp element carried by the mold.

45 4/ A method according to claim 1, wherein, after being blown, the blown blank is cooled by causing a cooling fluid to flow in the wall of the mold.

50 5/ A machine for manufacturing packaging articles, each article having a hollow body provided with a neck-forming open end, the machine being of the type comprising at least one assembly comprising a mold, means for positioning a flat piece of thermoplastic material over

an open end of a recess of the mold, means for heating
the material, a punch having a piston axially
displaceable into the mold from a retracted, rest
position in which it is situated outside the mold, into
5 an active, blank-forming position in which it penetrates
inside the mold, and means for blowing the resulting
blank against the wall of the mold, wherein the mold is
constituted by separable elements each constituting a
matrix for molding a segment of an article, the elements
10 being associated with one another by drive means for
controlling displacement thereof to open and close the
mold, and wherein the bottom of the mold is provided with
at least one suction tube for connection to suction
apparatus for holding an article against said bottom,
15 while the mold is being opened.

- 20 6/ A machine according to claim 5, including means for
handling articles in order to transfer them from the
bottom of the mold to a packaging station.
- 25 7/ A machine according to claim 5, wherein the mold
bottom is provided with channels opening out to the
outside in order to enable the air filling the mold to be
expelled while the blank is being blown.
- 30 8/ A machine according to claim 5, including trimming
means for trimming the flat piece of material or the
blown blank.
- 9/ A machine according to claim 5, wherein the mold
includes cooling channels integrated in the wall of the
mold for cooling the blown blank and suitable for being
connected to a source of cooling fluid.